

ENERGY FROM THE ENVIRONMENT

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Almost all power generators use fossil fuels or thermonuclear reactions. Waste chemical reactions pollute the atmosphere and caused great damage to human health, but mankind has invented a power generator as a heat pump.

The heat pump is a device that transfers heat energy from a heat source to a heat sink against a temperature gradient. The thermal energy moves opposite the direction of spontaneous heat flow. The heat pump is used for heating, it employs the same basic refrigeration type cycle used by an air conditioner or a refrigerator, but in the opposite direction, releasing heat into the conditioned space rather than the surrounding environment. Heat pumps generally draw heat from air or from the ground. Heat spontaneously flows from warmer places to colder spaces. A heat pump can absorb heat from a cold space and release it to a warmer one. Most of the energy for heating comes from the external environment, and only a fraction comes from electricity.

The two main types of heat pumps are compression and absorption. Compression heat pumps operate on mechanical energy (typically driven by electricity), while absorption heat pumps may also run on heat as an energy source (from electricity or burnable fuels). An absorption heat pump may be fueled by natural gas or LP gas, for example.

An indisputable advantage of heat pumps is their environmental safety. The heat pump does not produce and release any harmful emissions into the environment. This is ecologically clean and perfectly safe method of heating systems. We can use a heat pump instead of conventional heating systems, which use liquid or gaseous fuel, it reduces carbon dioxide and oxides of carbohydrate. The widespread use of technology allows you to significantly improve the ecology of the region. When ECOM heating costs reduced on average by 75%.

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